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REGION 4 CEM ENFORCEMENT PLAN

In order to be prepared for the growing attention to continuous compliance within the constraints of limited resources, a Continuous Emission Monitor Enforcement Plan (CEP) has been developed for implementation. The CEP has been developed based on guidance documents and comments from Headquarters, Regional and state/local air agency staff. Recommendations are provided in order to minimize the man-hours necessary to implement the CEP.

The purpose of the CEP is to ensure that sources with monitoring requirements are in continuous compliance with emission standards in addition to properly operating and maintaining their facilities and Continuous Emission Monitoring Systems (CEMS). Sources with continuous compliance problems are to be identified and appropriate follow-up actions are to be initiated to return problem sources to a continuous compliance status. Sources with excessive amounts of monitor downtime will also be identified and dealt with appropriately. The definition of sources with monitoring requirements includes sources with instrumental monitoring devices as well as other types of self-monitoring such as fuel sampling and analysis (FSA) for sulfur dioxide (SO₂) sources and recordkeeping/reporting requirements for Volatile Organic Compound (VOC) sources.

As an initial step, a list of State Implementation Plan (SIP) sources and New Source Performance Standards (NSPS) sources with monitoring requirements must be generated. Region 4 currently has a list of NSPS sources and SIP SO₂ sources required to submit Continuous Emission Monitoring (CEM) and FSA Excess Emission Reports (EER) on a quarterly basis. Therefore, identification of the other SIP and National Emission Standards for Hazardous Air Pollutants (NESHAP) sources with reporting requirements, and sources with VOC reporting requirements is necessary. In the near future, state and local agencies will be requested to identify these other sources so that the CEM subset of the Aerometric Information Retrieval System (AIRS) can be updated.

The results of the CEP should be significant. Sources with monitoring requirements will realize that EPA and the state/local agencies are actively utilizing EER and that the sources are not merely performing a required paper exercise. Sources will become conscious that environmental regulatory agencies are requiring them to remain in continuous compliance and to properly maintain and operate their facilities and CEMS. An overall reduction in air pollution will most likely occur and should be documented by improvements in sources' EERs. Moreover, the identification and enforcement of violators through the CEM mechanism should greatly enhance the Region's overall productiveness.

THE CEM ENFORCEMENT PLAN

The first step of the CEP is the review of EERs. The review of an EER is essentially accomplished by summarizing an EER into the form presented in Figure 1. Although most state/local agencies already summarize EER into this form, we recommend that the sources be required by the state/local agencies to submit a summary EER along with the raw CEM data. This will significantly reduce the man-hours necessary for EER review and will assist when inputting the data into the CEM subset of AIRS. As each source has been acknowledged to be summarizing correctly, a less detailed review of raw CEM data should ensue.

The second step of the CEP is the determination of the appropriate follow-up action. In order to determine the appropriate follow-up action, data from the summary EER will be used to target problem sources. The targeting criteria and follow-up actions indicated in Table 1 will be utilized as a guide but the final decision on the appropriate follow-up action should occur during the monthly conference calls. Of course, if an agency decides to adhere to the recommended follow-up actions in Table 1, the initiation of these actions prior to the monthly conference call is encouraged.

In general, a problem source will be considered one that is out of compliance greater than 5 percent of its total monitoring time or one that has monitor downtime greater than 5 percent of its total operating time. Please note that some sources that exceed this criteria may not be a problem source because of various circumstances such as limited operating time. Figure 2 provides example calculations for percent of time out of compliance and percent monitor downtime.

EPA Headquarters has issued guidance regarding the targeting criteria and follow-up actions; however, Region 4 will initially adopt a less stringent guidance because adherence to Headquarters' guidance would be too resource intensive. Eventually though, as experience is gained with the CEP, Region 4 will tighten the targeting criteria until Headquarters' guidance is realized. This should take place in FY-92.

LEGAL BASIS FOR ENFORCEMENT

Section 113(a)(1) and (3) of the Clean Air Act basically state that whenever, on the basis of any information available to him, the Administrator finds that any person (source) is in violation of SIP, NSPS, or NESHAP regulations, he may issue an order requiring such person (source) to comply with the regulations or he may bring a civil action against such person. Therefore, the Clean Air Act allows CEM data to be utilized for finding a violation of an emission standard. Headquarters' CEM policy specifies that CEM data, regardless of whether the CEM is the compliance method or not, can be used for enforcement. In addition, 40 Code of Federal Regulations (CFR) §60.11(d) and §61.12(c) specifically allows CEM data to be used in the enforcement of the operation and maintenance requirements of NSPS and NESHAP, respectively.

Some state and local agencies maintain that their regulations do not allow taking enforcement action based solely on CEM data (EERs). This may be true for citing a violation of an emission standard; however, many state and local agencies have regulations similar to 40 CFR §60.11(d) and agencies which have been delegated NSPS and NESHAP can initiate enforcement action based solely on CEM data. The type of appropriate follow-up action must take into account whether the CEM is the compliance method (determines compliance with an emission standard) or an indicator of proper operation and maintenance of the facility (is not the compliance method).

When emission violations are evident and the CEM is the compliance method, then an NOV must be issued citing violations of the emission standard and improper operation and maintenance of the facility (40 CFR §60.11(d) for NSPS sources, 40 CFR §61.12(c) for NESHAP sources and similar provisions for SIP sources). Only one emission violation need occur for an NOV to be issued and the "Timely and Appropriate Guidance", including penalties, applies.

If the CEM is not the compliance method and excessive emissions fall into the worst case scenario of Table 1, then a violation of 40 CFR §60.11(d) or similar provisions must be cited, if applicable. In addition, citing a violation of the emission standard should be considered. If either type of violation is cited and the source is in the "significant violator" population, then the "Timely and Appropriate Guidance", including penalties, applies.

THE CEP AND FUTURE ACTIVITIES

Region 4 is committed to utilizing CEM data in order to ensure continuous compliance for all sources with monitoring requirements. In addition, Region 4 encourages the state and local agencies to develop air inspection plans which recognize sources with monitoring requirements so that compliance inspection resources can be better utilized. Both the Inspection Frequency Guidance and the Compliance Monitoring Strategy allow the review of CEM data to be substituted for inspection of the facility.

In FY-91, the targeting criteria will be tightened based upon the results of FY-90 activities. In FY-92, the targeting criteria and appropriate follow-up action be altered to reflect Headquarters' guidance.

FIGURE 1

**SUMMARY REPORT - GASEOUS AND OPACITY EXCESS EMISSION
AND MONITORING SYSTEM PERFORMANCE**

Pollutant (Circle One): SO₂ NO_x TRS H₂S CO Opacity

Reporting Period Dates: From: _____ To: _____

Company Name: _____

AFS Number: _____

Emission Limitation: _____

Monitor Manufacturer: _____

Date of Latest CMS Certification or Audit: _____

Process Unit Description: _____

Total Source Operating Time In Reporting Period*: _____

EMISSION DATA SUMMARY*

CMS PERFORMANCE SUMMARY*

1. Reason for Excess Emissions:

a. Startup/Shutdown _____

b. Control Equipment Problems _____

c. Process Problems _____

d. Other Known Problems _____

e. Unknown Problems _____

2. Total Excess Emissions _____

3. $\frac{\text{Total Excess Emissions} \times (100)}{\text{Total Source Operation Time}} = \text{_____} \%$

1. Reason for CEM Downtime:

a. Monitor Equipment Malfunctions _____

b. Non-Monitor Equipment Malfunctions _____

c. Quality Assurance Calibration _____

d. Other Known Causes _____

e. Unknown Causes _____

2. Total CMS Downtime _____

3. $\frac{\text{Total CMS Downtime} \times (100)}{\text{Total Source Operating Time}} = \text{_____} \%$

On a separate page, describe any changes since the last reporting period in CMS, process or controls.

I certify that the information contained in this report is true, accurate and complete.

NAME: _____

TITLE: _____

SIGNATURE: _____

* FOR OPACITY, RECORD ALL TIMES IN MINUTES. FOR GASES, RECORD ALL TIMES IN HOURS.

TABLE 1. Target Criteria and Follow-up Actions ^a

Percent of Time Out-of Compliance	Percent of Monitor Downtime	Appropriate Follow-up Action
< 2.0%	< 2.0%	If both cases exist, send letter acknowledging receipt of EER and encouraging proper operation and maintenance of facility and CEM.
> 2.0% and < 5.0%	>2.0% and < 5.0%	If either or both cases exist, then warn by letter or telephone of unacceptable condition.
> 5.0% and < 10.0%	>5.0% and <10.0%	If either or both cases exist, then warn by letter of unacceptable condition, request explanations of condition, and request corrective action plan to prevent condition from reoccurring.
> 5.0% and < 10.0% for two consecutive quarters or > 10.0%	> 5.0% and < 10.0% for two consecutive quarters or > 10.0%	If either or both cases exist, then issue Notice of Violation and require performance (compliance) test for monitored pollutant, monitor certification (Performance Specification) tests and request corrective action plan to prevent condition from reoccurring . (Timely and Appropriate guidance including penalties applies).

^a Where CEMS are not the compliance test method for the emission standard.

Figure 2. Calculations to Determine Percentages of Time Out of Compliance and Monitor Downtime.

1. Percent of Time Out Of Compliance:

$$\text{TOOC, \%} = \frac{\text{TEE, minutes or periods} * 100}{(\text{TSO} - \text{TMD}), \text{ minutes or periods}}$$

Where: TOOC = Percent of time out of compliance
 TEE = Amount of time with excess emissions, minutes or periods
 TSO = Total source operating time, minutes or periods
 TMD = Monitor downtime, minutes or periods

2. Percent Monitor Downtime

$$\text{MD, \%} = \frac{\text{TMD, minutes or periods} * 100}{\text{TSO, minutes or periods}}$$

Where: MD = percent of monitor downtime